



## SEQUENCE LISTING

Wei-Yu  
Lo, Ming Ching  
Liau, Pei-Ru

<120> LAC SHUTTLE VECTORS

<130> 12875-002001

<140> 09/778,516  
<141> 2001-02-07

<150> TW 89110235  
<151> 2000-05-26

<160> 6

<170> FastSEQ for Windows Version 4.0

<210> 1  
<211> 8115  
<212> DNA  
<213> Lactobacillus plantarum

<400> 1

gatgtacggg ccagatatac gcgttgacat tgattattga ctatgttatta atatgtatca	60
attacgggggt cattagttca tagccatata atggagttcc gcgttacata acttacggta	120
aatggcccgcc ctggctgacc gccaaacgac ccccgcccat tgacgtcaat aatgacgtat	180
gttcccatag taacgccaat aggacttcc cattgacgta aatgggttgg ctatttacgg	240
taaactgccc acttggcagt acatcaagtgt tatcatatgc caagtacgccc cccttattgac	300
gtcaatgacg gtaaaatggcc cgccctggcat tatgcccagt acatgacctt atgggacttt	360
cctacttggc agtacatcta ctgtttagtc atcgcttata ccatggtgat gcgggtttgg	420
cgtacatca atgggcgtgg atagcgggtt gactcacggg gatttccaag tctccacccc	480
attgacgtca atgggaggtt gtttggcac caaaatcaac gggactttcc aaaatgtcgt	540
aacaactccg ccccatgtac gcaaatgggc ggtaggcgtg tacgggtggga ggtctatata	600
agcagagctc tctggctaac tagagaaccc actgcttact ggcttatacga aattaatacg	660
actcactata gggagaccca agcttggta cgagctcgga tccactagta acggcccca	720
gtgtgctgga attctgcaga tatccatcac actggcgcc gctcgagcat gcatctagag	780
ggccctatttc tatagtgtca cctaaatgct agagctcgct gatcagcctc gactgtgcct	840
tctagttgcc agccatctgt ttttggccc tccccctgtc cttcccttgc cctggaaaggt	900
gccactccca ctgtcccttc ctaataaaat gaggaaatttgc catcgatttgc tctgagtagg	960
tgtcattcta ttctgggggg tgggggtgggg caggacagca agggggagga ttggaaagac	1020
aatagcaggc atgctggggta tgcgggtggc tctatggctt ctgaggcgaa aagaaccaggc	1080
tgcattaaatg aatcgccaa cgccggggga gaggcggtt gcgtatttgg cgctcttccg	1140
cttcctcgct cactgactcg ctgcgtcg tgcgttgcgt gcggcgaggc gtatcagctc	1200
actcaaaggc ggtataatcgg ttatccacag aatcaggggta taacgcaggaa aagaacatgt	1260
gagaaaaggcc ctagaaaaag gccaggaacc gtaaaaaggc cgcgttgcgt gcgttttcc	1320
ataggctccg ccccccgtac gagcatcaca aaaatcgacg ctcaagtcag aggtggcgaa	1380
acccgacagg actataaaaga taccaggcg tttccctgg aagctccctc gtgcgtctc	1440
ctgttccgac cctggcgctt accggatacc tgcgttgcgt tctcccttc ggaagcgtgg	1500
cgctttctca atgctcacgc tgcgttgcgt tgcgttgcgtt gtaggtcgtt cgctccaagc	1560
tggctgtgt gcacgaaccc cccgttcaggcc cggaccgtc cgccttattcc ggtactatc	1620
gtcttgagtc caacccggta agacacgact tatcggcaact ggcagcagcc actggtaaca	1680
ggatttagcag agcgaggat gtaggcgtt ctacagagtt cttaacttgg tggcttaact	1740

acggccatcc	tagaaggaca	gtatttggta	tctgcgctct	gctgaagccca	gttacccctcg	1800
aaaaaaaggt	tgttagctct	tgatccggca	aacaaaccac	cgctggtagc	ggtggttttt	1860
ttgtttcaaa	gcagcagatt	acgcgcagaa	aaaaaggatc	tcaagaagat	ccttgatct	1920
tttctacggg	gtctgacgct	cagtggaaacg	aaaactcacg	ttaaggatt	ttggtcatga	1980
gcggatacat	atttgaatgt	atttagaaaa	ataaacaat	aggggttccg	cgcacatttc	2040
cccgaaaagt	gccacctgac	gtcgacggat	cgggagatca	acgtaaattc	cgttggcata	2100
tccctttttt	gttgcagct	tgctgacttc	tgatacaggt	tttagcatta	ctccaattta	2160
tttggagtgt	aagtgcacat	tatcatgtag	tgcgccattat	catgtagtgc	gcattatcat	2220
gtagtgcgca	ttatcatgt	gtgcgcatta	tcatgtagt	cgcattatca	tgtagtgcgc	2280
attatcatgt	agtgcgcaca	ttatcatgt	cattatcatg	tagtgcgc	tatcatgtag	2340
tgcgacatt	atcatgtagt	gcmcattatc	atgtagtgc	cattatcatg	tagtgcgcac	2400
ttacacacaa	catgaagtt	tgttgctaa	aacccatcaa	aacctgcac	agatttcgcg	2460
ttgctcaaac	gtaactgact	tgcgtcagtt	tggaacattc	aaaaataaaat	aagttcagtc	2520
gctagctcct	tgcgactttt	ttattttga	acgtaattt	taaaggctct	tatttgcgtt	2580
ctaagcgatt	ttagctaaca	gttagtatac	taactgtctg	tcaacggtaa	atcgacttag	2640
aggggcttat	tgaggcttac	aggcgatatt	agcccctctt	ggaggcctta	aggagttgat	2700
agactagaca	ataccaaaaag	cctgacgtct	tggaaaacaa	gcccttgttt	tcccggagccc	2760
agcggccgca	agcggtacgg	tccagctgg	tcagctggc	agtgtggctg	aaagccacgg	2820
tttaaaaaaa	gcagttcagc	ggtttttgct	gatctgctt	ttggggttt	aaaacgcaat	2880
ttttggcggt	ttcttcttat	cttgatacta	ttagcaacaa	ctagttttt	aaaatcaagc	2940
ttgatttaggc	ttaattgggg	ttgtatccat	tgattttata	ggcttttggt	gtattattag	3000
ggttataaat	tgttgaaag	aaagacaaaa	taaaaaccca	cgtcacaatt	cctagttgg	3060
ccgctcgaa	cacgtgagtt	gattatcatt	tgcgatttt	agcctattct	aggggaaaag	3120
ccctatgatg	tcaaggttat	aagcttattg	aaaaagatag	tcaagtcctt	cacgtggata	3180
aactggagga	gctttttagt	tcagaaattt	ttgaagataa	aactgaaaat	ggcaaagtt	3240
gaccttggcg	agaacggaaag	attgaaaatg	tgcgctatgc	cgaatattt	gcaatcttag	3300
aatttaaacg	ggcacatgt	gtacggggtt	gtggtgaagt	tttgcgttt	cgtaaagatt	3360
gcfgagcactt	aaaactttat	caaacgtgg	tttgcataaa	acgattgtgt	ccattgtgt	3420
attggagaag	gagcatgaaa	aactcgagcc	agttaaaaca	aattattgcg	gaagcagtt	3480
caagagagcc	taaaggacgg	tttttggttt	taactttaac	cgtaaaaac	gctcatccag	3540
cagaggagtt	aaaagtgtct	ttaagagctt	tgactaaagc	ctttaataag	ctaactcgct	3600
ataaaaaaaat	gactaaaaat	ttattgggtt	atttacgttc	aacggaaatt	accgttaatg	3660
aacaagacgg	gtcatataat	caacacttgc	atgtgttgc	gtttgtaaaa	tcaagttatt	3720
ttaagaattc	aaataattat	ttagcacaag	cagaatgggc	aaaattatgg	caaaaagcct	3780
tgaaagggt	ttatgagcc	gtggtgcatt	tgcaggctgt	taaagctaac	aaacgtaaag	3840
gaactgactc	tttgcgact	agtgcgaaag	aaacggcgaa	atacgaggt	aaatcagct	3900
attatatgac	ggctgtatgt	gagcgttaatt	ttgggtgtat	taaaaattt	gagttatgcct	3960
tagctgaaac	acgacaaaatc	agctatgg	gattattaa	gcaaaat	caagatttga	4020
aacttgaaga	tgttgagaat	ggtgatttag	ttcatgttgg	cgatgaagat	tacaccaaag	4080
agcaaatgg	agctgcggaa	gaagttgtcg	caaaatgg	tttaataaa	caaaattatt	4140
ttatattggta	aagagaatgt	caggatata	tctccgatc	ccctatggc	gactctcagt	4200
acaatctgct	ctgatgccgc	atagtaagc	cagtatctgc	tccctgctt	tgtgttgag	4260
gtcgctgagt	agtgcgcgag	caaaattt	gctacaacaa	ggcaaggctt	gaccgacaat	4320
tgcatgaaga	atctgcttag	ggttaggc	tttgcgtc	tgcgttagaa	gcaaactaag	4380
agtgtgttga	gtagtgcagt	atcttaaaat	tttgtataat	aggaattgaa	gttaaattag	4440
atgctaaaaa	tttgcatttt	agaaggagtg	attacatgt	tggcagccag	tctccgggca	4500
attaatgaac	ttggacatgg	ttgacgaccc	ggtcttgc	agccgaattc	gaccacact	4560
gcggccgtt	ctagggtatc	gatccgataa	aaagttaggc	gacggctt	ccctggtgcc	4620
agcagacgg	aaggcttac	cgccatttgc	cgtactgc	cgccagct	ccaagacccg	4680
gcactcgatc	gtccctggaaa	atgaacatgg	ggtcttggc	ttgattcacc	ttggcctggg	4740
cacggtcaaa	ttaaacggg	ctggcttgc	cagctatgtt	gaagagggca	gccaggt	4800
agccggccag	cagatccctg	aattctgg	cccgccgatc	aagcaggcc	agctggacga	4860
cacggtaatc	gtgaccgtca	tcaacagc	aacttccaca	aatagccaga	tgctcttgc	4920
gatcgccac	agcgtccaag	ccctggat	tgtattcaag	ttagaagg	agaattagaa	4980
aatgagacaat	aagtttagt	aagaaaaaa	agttgaccag	gcagacct	cctggctgac	5040
tgacccggaa	gttacgaa	tcaataca	tccccgcac	tccgaccat	agtccttcca	5100
aaqcccaqqaa	qaactqqqq	agqqcaqtc	cagtttaqt	caqtcctqq	acqqqqactq	5160

gctgattgac tacgctgaaa acggccaggg accagtcaac ttctatgcag aagactttga	5220
cgatagcaat tttaagttagt ccaaagtacc cggcaacctg gaactgcaag gcttggcca	5280
gccccagttat gtcaacgtcc aatatccatg ggacggcagt gaggagattt tcccgccccca	5340
aattccaagc aaaaatccgc tcgcttctta tgtcagatac ttgcacctgg atgaagctt	5400
ctgggacaag gaagtcaagct tgaagtttga cggggcggca acagccatct atgtctggct	5460
gaacggccac ttcgtcggct acggggaaaga ctccttacc ccaagcgaat ttatggttac	5520
caagttcctc aagaaagaaa ataaccgcct ggcagtggct ctctacaagtttccgc	5580
ctcctggctg gaagaccagg acttctggcg catgtctggat ttgttcagat cagtactct	5640
tcaggccaag cgcgtctgc acttggagga ccttaagctt acggccagct tgaccgataa	5700
ctaccaaaaa gaaaagctgg aagtcgaagc caatattgcc taccgcttgc caaatgccag	5760
ctttaagctg gaagtgcggg atagtgaagg tgacttgggt gctaaaaagc tggggccaaat	5820
cagaagcggag cagctggaaat taaactctggc tgatttgcctt gtagctgcct ggagcgcggaa	5880
aaagcctaaac ctttaccagg tcggcctgtt ttataccag gcaggcaggcc tcttagaggt	5940
tagccggcag gaagtgggtt tccgcactt tgaactaaaa gacgggatata ttacccctaa	6000
cggccagcgg atcgtcttca agggggccaa cggcacgaa ttgcacgatgatgggtcg	6060
ggctatcacg gaagaggata tgcattctggg catcaagacc atgaagcga gcaacatcaa	6120
tgctgtccgc tgctctcact acccgaacca gtccttctt taccggctct gtgacaagta	6180
cggcccttac gtcattgtat aagctaacct ggaaagccac ggcacctggg aaaaagttggg	6240
ggggcacgaa gatccttagt tcaatgttcc aggcgtatgac cagcattggc tggagccag	6300
cttattcccggtt gtaagaaca tgcattggctcg ggacaagaac catgcttcaa tcctaatctg	6360
gtcttaggc aatgagtctt acggccggcac tgcctttgcc caaatggctg attacgtccg	6420
gaaggctgat ccgaccggg ttcagacta tgaaggggtt acccacaacc ggaagtttga	6480
cgacgccacc cagattgaaa gcccggatgtt tgctccggcc aaggtatgg aagaataactt	6540
gaccaataaaa ccagccaaac catttatctc agttgaatac gtcacgcac tggcaactc	6600
cgtcggtgac ctggccgcctt acacggccctt ggaaaaatacc cccactacc agggcggctt	6660
cattctggac tggattgacc aaggactgga aaaagacggg cacctgtttt atgggggcga	6720
cttcgatgac cggccaaaccg actatgaattt ctgcgggaaac ggcctggctt ttgcgtaccg	6780
gactgaatcg cggaaactgg ctaatgtcaa ggcccttac gccaaccttta agttagaagt	6840
aaaagatggg cagctttcc tcaaaaacga caatttattt accaacagctt catcttacta	6900
cttcttgact agtctttgg tgcattggcaa ttgcacctac cagagccggc ctctgacctt	6960
tggcctggag ctcggcaat ccgggacctt tgcctgcct tggccggaaat tgcgtatga	7020
aaaaggggag gtcgttacc ggttaacggc ccactaaaaa gaagacttgc tttggccggaa	7080
tgagggcttcc actgtgcgtt aagcagaaga agtagctcaa aagctgcggg aatttaagcc	7140
ggaagggcgg ccagatttag ttgattccga ctacaaccta ggcctgaaag gaaataactt	7200
ccaaattctc ttctccaagg tcaaggcgtt gccgggttcc ctcaagtatg cccgttaggga	7260
atacttgaag cggctggccgg aatttacctt ctggccggcc ctgacggaca acgaccgggg	7320
agctggttac ggctatgatc tggccgggtt ggaaaatgcc ggcaagtatg cccgcttgc	7380
agacatcagc tgcgagggtca aggaagactc cgtttggcctt aagactgcct ttacgttgc	7440
tgtcgcccta aagggtgatt taaccgtgac ctatgaatgc gatggacggg gcaagattgc	7500
tgtaacagct gacttcccag gcccgggaaatggc agctgtctc ttgcacggctt ttggcttgc	7560
cctggccctg ccaaaaagaaatggc tgaccgatata cccactat gtcgtggcctt ctaatgagag	7620
ctacccagac cgttggaaat gtaatttaccc gggcatctac cagggagccgg taaaaaagaa	7680
ctttagccca ttcgttccgc agggaaacggg caacccggac aagtttcgtt ggtaccagct	7740
ctttgtatggaa aaggccggct tggatattac ggcataatggg gcagacttgc actttgtctgc	7800
tttgcctat tctggccccc aatttgcgtt agcggaccac gcttttgcac tgactaacaa	7860
ttacacttgg gtttagaccc taaaggccca gatgggggtt ggcggggatg actctgggg	7920
gcagaagggtc caccggaaat tctggccgtt tgctaaaaa gcccggccac ttgcctgggt	7980
gattcagccc ctttactaa aataaatgc taaatgttactt aacaggatg aaattttagt	8040
aaaagcaaaatg cggatgttgggaa agatggcaac gatcagagaa gtcggcaagcc agccggcgtt	8100
tcgcttagcga cggtc	8115

&lt;210&gt; 2

&lt;211&gt; 8115

&lt;212&gt; DNA

&lt;213&gt; Lactobacillus plantarum

&lt;400&gt; 2



ttttaaacgg	tggctttcag	ccacactgac	cagctgaacc	agctggaccg	taacgcttgc	3480
cgccgctgg	ctcgggaaaa	caagggctt	tttccaaga	cgtcaggctt	ttggattgt	3540
ctagtctatc	aactcotta	agcctccaag	aggggcta	atcgccctgt	aggctcaata	3600
agcccctcta	agtcgattt	ccgttgacag	acagttagat	agctaactgt	tagctaaaat	3660
cgcttagaac	gcaaataaga	gcctttaaaa	ttaacgtca	aaaataaaaa	agttcgagg	3720
agctagcgac	tgaacttatt	tattttga	tgccaaac	tgacgcaagt	cagttacgtt	3780
tgagcaacgc	gaaatctgt	gcagggttt	atgggtttag	cacaacacaa	cttcatgtt	3840
tgtgttaagt	cgcactacat	gataatgcgc	actacatgtat	aatgcgcact	acatgataat	3900
gtgcgcacta	catgataatg	cgcactacat	gataatgtac	atgataatgt	gchgactaca	3960
tgataatg	cactacatga	taatgcgcac	tacatgataa	tgccgactac	atgataatgc	4020
gcactacatg	ataatgcgc	ctacatgata	atgcgcacta	catgataatg	tgcaacttaca	4080
ctccaaataa	attggagtaa	tgcctaaaacc	tgtatcagaa	gtcagcaagc	tgacaacacaa	4140
aaaggatata	gccaacggat	ttaccgttga	tctccgatc	ccctatggtc	gactctcagt	4200
acaatctgct	ctgatgcgc	atagttaa	cagtatctgc	tccctgctt	tgtgttggag	4260
gtgcgtgagt	agtgcgcgag	caaattttaa	gctacaacaa	ggcaaggctt	gaccgacaat	4320
tgcatgaaga	atctgcttag	ggttaggcgt	tttgcgtgc	ttcgttagaa	gcaaactaag	4380
agtgtgttga	gttagtgcagt	atctttaaaat	tttgtataat	aggaattgaa	gttaaatttag	4440
atgctaaaaa	tttgcattta	agaaggagt	attacatgtat	ttgcagccag	tctccggca	4500
attaatgaac	ttggacatgg	ttgacgaccc	ggtcttgca	agccgaattc	gaccacactg	4560
gcggccgtt	ctagggtatc	gatccgataa	aaagttaggc	gacggctt	ccctgggt	4620
agcagacgg	aaggcttacg	cgccatttgc	cggtaactgtc	cgccagctt	ccaagacccg	4680
gcactcgatc	gtcctggaaa	atgaacatgg	ggtcttggtc	ttgatttacc	ttggccttgg	4740
cacggtaaaa	ttaacacgg	ctggctttgt	cagctatgtt	gaagagggca	gccaggtaga	4800
agccggccag	cagatcctgg	aattctggga	ccggcgatc	aagcaggcca	agctggacga	4860
cacggtaatc	gtgaccgtca	tcaacacgca	aacttccaca	aatagccaga	tgcttgc	4920
gatcgccac	agcgtccaag	ccctggatga	tgtatcaga	ttagaaggg	agaatttagaa	4980
aatgagcaat	aagttat	aagaaaaaa	agttgaccag	gcagacctt	cctggctgac	5040
tgacccggaa	gtttacgaag	tcaatataat	tcccccac	tccgaccat	agtcttcca	5100
aagccaggaa	gaactggagg	agggcaagtc	cagtttagt	cagttccctt	acggggactg	5160
gctgatttgc	tacgctgaaa	acggccaggg	accgtcaac	ttctatgcag	aagactttga	5220
cgatagcaat	tttaagtct	tcaaagtacc	cggcaacct	gaactgcaag	gtttggcca	5280
gccccagttat	gtcaacgtcc	aatatccat	ggacggcagt	gaggagatt	tccccc	5340
aattccaagc	aaaaatccgc	tcgcttctt	tgtcagatac	tttgacctt	atgaagctt	5400
ctggacaag	gaagtctag	tgaatgtt	cgggccggca	acagccat	atgtctgg	5460
gaacggccac	ttcgtcggt	acggggaa	ctccttacc	ccaagcgagt	ttatgttac	5520
caagttcctc	aagaaagaaa	ataaccgcct	ggcagtggct	ctctacaat	attcttccgc	5580
ctcctggctg	gaagaccagg	acttctggcg	catgtctgtt	ttgttcat	cagtgactct	5640
tcaggccaag	ccgcgtctgc	acttggagga	ccttaagctt	acggccagct	tgaccataa	5700
ctaccaaaaa	ggaaaagctt	aagtctgaac	caatattgc	taccgcttgc	caaatgccc	5760
ctttaagctg	gaagtgcgg	atagtgtt	tgacttgg	gtctaaa	tggcccaat	5820
cagaagcgag	cagctgaat	tcaacttgc	tgatttgc	gtagctgc	ggagcgcgg	5880
aaagcctaac	ctttaccagg	tccgcctgt	tttataccag	gcaggcagcc	tcttagaggt	5940
tagccggcag	gaagtgggtt	tccgcaactt	tgaactaaa	gacgggat	tgtacctt	6000
cggccagcg	atcgtcttca	agggggccaa	ccggcacgaa	tttgacagta	agttgggtc	6060
ggctatcact	gaagaggata	tgtatctt	catcaagacc	atgaagcgaa	gcaacatcaa	6120
tgctgtccgc	tgctctact	acccgaacca	gtccctt	taccggct	gtgacaagta	6180
cggccttac	gtcatttgc	aagctaacct	ggaaagccac	ggcacctt	aaaaagtgg	6240
ggggcacgaa	gtatctact	tcaatgttcc	aggcgatgac	cagcatttgc	tgggagcc	6300
cttacccgg	gtgaagaaca	tgtatggct	ggacaagaac	catgttca	tcctaatct	6360
gtctttaggc	aatgatctt	acggccgac	tgtcttgc	caaatggct	attacgtcc	6420
gaaggctgtat	ccgaccgg	ttcagcacta	tgaagggt	acccacaacc	ggaagtttga	6480
cgacgcccacc	cagattaaa	gccggatgt	tgctccggcc	aaggtat	aagaataact	6540
gacaataaaa	ccagccaac	catttatctc	agttgata	gtcacgc	tggcaactc	6600
cgtcggtgac	ctggccgcct	acacggccct	ggaaaaata	ccccactacc	agggcgg	6660
catctgggac	tggatttacc	aggactg	aaaagacgg	cacctgtt	atggggcga	6720
cttcgatgac	cggccaaacc	actatgaa	ctgcggaa	ggccttgc	ttgctgacc	6780
gactgaatcg	ccgaaacttgg	ctaatgtca	ggcccttac	gccaacctt	agttagaagt	6840

aaaagatggg cagctttcc tcaaaaacga caatttattt accaacagct catcttacta	6900
cttcttgcgt agtctttgg tcgatggcaa gttgacctac cagagccggc ctctgacctt	6960
tggcctggag cctggcgaat cccggacctt tgccctgcct tggccggaaag tcgctgtga	7020
aaaaggggag gtcgtctacc gggtaacggc ccacttaaaa gaagacttgc cttggccgga	7080
tgagggcttc actgtggctg aagcagaaga agtagctcaa aagctgccgg aatttaagcc	7140
ggaagggcgg ccagatttag ttgattccga ctacaaccta ggcctgaaag gaaataactt	7200
ccaaattctc ttctccaagg tcaagggctg gccggttcc ctcagaatgt ccggtaggga	7260
atacttgaag cggctgccgg aatttacctt ctggccggcc ctgacggaca acgaccgggg	7320
agctggttac ggctatgatc tggcccggtg ggaaaatgcc ggcaagtatg cccgctgaa	7380
agacatcagc tgcgaggtca aggaagactc cgtttggtc aagactgctt ttacgttgc	7440
tgtcgcccta aagggtgatt taaccgtgac ctatgaagtc gatggacggg gcaagattgc	7500
tgtaacagct gacttcccag ggcgccaaga agctggtctc ttgcccagct ttggcttga	7560
cctggccctg ccaaaagaac tgaccgatta ccgctactat ggtctggac ctaatgagag	7620
ctacccagac cgcttggaaag gtaattacct gggcatctac cagggagccg taaaaaagaa	7680
ctttagccca ttcgtccgc agggaaacggg caaccggagc aaggttcgct ggtaccagct	7740
ctttgtgaa aaggccggct tggaaattac ggc当地atggg gcagacttga acttgc	7800
tttgc当地at tctggccccc aaattgaagc agcggaccac gctttgaac tgactaaca	7860
ttacacttgg gtttagagcct taagcgc当地a gatgggggtc ggc当地gggatg actcctgggg	7920
gcagaaggc当地 caccggaaat tctggccctgaa tgctcaaaaa gcccggccagc ttccctgg	7980
gattcagccc ct当地tactaa aataaaatgc当地 acaattgact taacaggatg aaattttagt	8040
aaaagcaaag cgagtggagga agatggcaac gatcagagaa gtgccaaggc agccggcgtg	8100
tcgctagcga cggc	8115

&lt;210&gt; 3

&lt;211&gt; 30

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; oligonucleotide for PCR

&lt;400&gt; 3

aagctcatga ttggcagcca gtctccgggc

30

&lt;210&gt; 4

&lt;211&gt; 30

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; oligonucleotide for PCR

&lt;400&gt; 4

gaccctcatga accgtcgctt ggc当地acacgccc

30

&lt;210&gt; 5

&lt;211&gt; 31

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; oligonucleotide for PCR

&lt;400&gt; 5

ttaacgatcg tttagaagcaa acttaagagt g

31

&lt;210&gt; 6

<211> 27  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> oligonucleotide for PCR

<400> 6  
ttaaacgatcg atgtaatcac tccttct